### Arizona's Instrument to Measure Standards (AIMS)

Sample Test Grade 7



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Assessment Section 602-542-5031

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## READING

### New Girl

The New Girl,

Clothes a calamity Dress a fashion don't Shoes just short of style.

5 Hair is a nightmare,

> Too long, too short Frizzy, flaky, spaghetti stringy Mousy, ratty, porcupine spiky.

Can't walk or talk,

10

15

Gawky, graceless Conversationally clueless, Spastically sputters.

Looks all wrong,

Blemished complexion imperfection, Metal-mouthed grimace, Stocky, bulky, hulk.

Oh, how I wish I wasn't

The New Girl.

- Which word **best** describes the mood of the passage?
  - hostile A
  - В friendly
  - C hopeful
  - D melancholy

2	In w	In which stanza does the author describe the new girl's speech?		
	A	3		
	В	4		
	C	8		
	D	10		
3	Whi	ich of the following is an example of a metaphor?		
	A	Hair is a nightmare		
	В	Can't walk or talk		
	C	Looks all wrong		
	D	The New Girl		
4	Base	ed on this passage, which of the following <b>best</b> describes the new girl's feelings?		
	A	confident		
	В	immature		
	C	frustrated		
	D	fashionable		

#### A Simple Lesson

"Another bad day at school, m'ijo<sup>1</sup>?" my father asked as I came into the room.

"How could you tell? I didn't slam the door or anything," I replied. Over the past two months I had either slammed the door or thrown my backpack across the room every time I came home from school. Papa thinks it has something to do with moving to a new house.

"I know this move has been hard on you. Leaving your friends and cousins behind is tough," Papa said, as he put his arm around my shoulder. "What you must remember is that, with a lot of hard work and some time, you will make new friends"

"You don't know how hard it is. This year my baseball team would have won the championship. They won't even give me a chance to pitch here. All I get to play is right field, and that's the worst!"

Papa turned toward me, "Things will get better, I promise you. Let me ask you, do you know why you were named David Lorenzo?"

"Yes, your name is David and grandfather's name is Lorenzo."

"Very good, and what makes your grandfather so important, m'ijo?"

"He was the first in the family to come to this country and all that," I answered.

"That is only partly correct. Your grandfather was a very great man. In Mexico he had been a teacher. When he came to America he could only get manual labor jobs because he didn't speak the language. It took him two years before he spoke English well enough to be allowed to teach here, but he did it. He never complained because he knew change could be difficult. Did he ever tell you that?" my father asked.

I looked down at my feet, ashamed at my behavior. "No. That must have been hard," I said sheepishly.

"Your grandfather taught your uncles, aunt, and me that if you let people see your talent they will accept you for who you are. I remembered that lesson when I went off to college. When you were born I wanted my son to never forget that great man. I want you to always remember what my father taught me, even if it takes a few years for people to see who you are," said Papa.

All I could say was, "Okay." Then I asked, "What should I do now?"

Laughing, Papa said, "How about you pitch a few to me? Your curveball needs some work."

<sup>1.</sup> In Spanish, m'ijo (mẽ' hō) is the colloquial form of mi hijo, meaning "my son"

5	After reading "A Simple Lesson," what can the reader infer about David		
	<b>A</b> He thinks his father lives in the past.		
	В	He loves to play at the position of pitcher in baseball.	
	C	He will continue to dislike school and his new home.	
	D	He would rather live with his grandfather.	
6	In "	A Simple Lesson," what does David <b>not</b> learn about his grandfather?	
	A	he spoke both English and Spanish	
	В	he taught in both Mexico and America	
	C	he played baseball when he lived in Mexico	
	D	he did manual labor to support his family in America	
7	Base	ed on the passage, what does the word "sheepishly" mean?	
	A	slyly	
	В	clumsily	
	C	shyly	
	D	slowly	
8	Acc	ording to the footnote, which of the following rhymes with mijo?	
	A	I go	
	В	my toe	
	C	see two	
	D	we hoe	

5

9	In the passages "New Girl" and "A Simple Lesson," which of the following	g is the
	common conflict?	

- A person vs. person
- **B** person vs. self
- C person vs. nature
- **D** person vs. society

### 10 Which of the following is **not** true of both "New Girl" and "A Simple Lesson?"

- **A** both deal with the same situation
- **B** both have minor characters
- C both deal with personal conflict
- **D** both have the same setting

### 11 Which theme is common to both a "Simple Lesson" and "New Girl?"

- A appreciating one's heritage
- **B** enjoying school
- C adjusting to new situations
- **D** preparing for the future.

6

**DIRECTIONS:** Read this advertisement and then answer questions 12 through 16.

### **Huntington Housewares**

Huntington Housewares is committed to bringing you the highest quality housewares at the lowest price. Dare to compare our prices to the prices of our competitors. You won't find better quality – or better prices – anywhere else! You can trust Huntington Housewares when you want the best.

Nonstick coar Bake four Be	Belgian Waffle Maker ting makes clean-up a breeze lgian waffles at once h and ready light	<b>Our price</b> \$69.99	Compare at \$85.99
Brew 8 cups of Stainless stee	Professional-Grade Home Coffee Maker of coffee at a time l water tank, easy-to-use controls and brew light te timer and automatic shutoff	\$99.99	\$129.50
Wide, non-sk 36 oz glass ja	r is dishwasher safe , stainless steel blades	\$149.99	\$199.99

#### **Order Information:**

To order by phone call our local customer service number: (602) 555-7112

To order Online go to our website: www.HuntingtonHW.com

To order by mail, fill out the order form on page 175 of the catalog and send it to:

**Huntington Housewares** 

2625 Dalton St.

Carson, CA

90810

or fax your order to: (602) 555-7113

#### **Payment Method:**

All orders from individuals must be accompanied by payment or credit card information. We accept personal checks and major credit cards.

Go On

12	According to the advertisement, where can the customer find an order form?	
	A	page 175 of the catalog
	В	Carson, California
	C	www.HuntingtonHW.com
	D	the telephone operator
13	In th	ne passage, what methods of payment are <b>not</b> accepted?
	A	VISA
	В	Master Card
	C	Cash
	D	Check
14		by has decided to buy the Belgian Waffle Maker. Which of the following resources ald be the <b>most</b> helpful in finding information on maintaining the machine?
	A	A brand name cook book
	В	Three-year guarantee
	C	Warranty contract
	D	Instructional manual
15	Whi	ich of the following is missing from the advertisement?
	A	comparison prices
	В	description of items
	C	how to order using the catalog
	D	where to return items

8

- 16 What is the effect of the labels "Our price" and "Compare at"?
  - **A** They offer basic information about ordering online.
  - **B** They indicate a preference for one company.
  - C They explain how to make a credit card purchase.
  - **D** They help the reader understand product differences.

Go On

9

### **DIRECTIONS:** Read this letter and then answer questions 17 through 23.

November 19, 2004

Supermart 11324 E. Maple Street Peoria, AZ 85307

Dear Mr. King:

Your grocery store is outstanding in many ways. I enjoy the selection of <u>produce</u> and fresh bakery items. I have been a long time Supermart shopper and hope to continue for many years. I have found, however, that I must make a separate shopping trip to one of your competitors because there are many items your store does not carry. This becomes inconvenient for me, as my time is valuable, and I do not like to make two trips. Your low prices and excellent customer service keep me coming back to Supermart, but I would be a more satisfied customer if I could find all the items I need in one place.

Specifically, I have never been able to purchase nacho cheese soup at your store. I can find other flavors of soup, but your store does not carry nacho cheese soup, a common ingredient in many of my casserole recipes. In addition, I can only find large wonton wrappers, while many other stores carry both large and small and offer a more varied selection for their customers. Another example is Regent Brand Chili Seasoning. Though it is not a leading brand, it is still common on the shelves of other grocery stores in this area and is superior in flavor to its peers.

I sincerely hope to continue a relationship with your store, and I hope that you will consider the possibility of expanding your inventory to be more competitive.

Yours truly,

Bob Watson

**Bob Watson** 

- According to the letter, which of the following will the writer **most likely** do?
  - A wait for a response
  - **B** find another place to shop
  - C shop for bakery items only
  - **D** recommend the store to friends

Go On 📂

10 Revised 9-2-05

18	Wh	ich of the following is the <b>best</b> definition of the word " <u>produce</u> " as used in the letter?
	A	create
	В	soup and cheese
	C	provide for sale
	D	fruits and vegetables
19	Aft	er reading this passage, the reader can infer that Bob Watson is –
	A	an impatient customer
	В	an excellent baker
	C	interested in cooking
	D	a seventh grade student
20	In t	he passage, which of the following is an example of a fact?
	A	I have never been able to purchase nacho cheese soup at your store.
	В	Your grocery store is outstanding in many ways.
	C	Regent Brand Chili Seasoning is superior in flavor to its peers.
	D	My time is valuable.
21		his passage, which of the following is <b>not</b> an example of the letter writer's purpose for ting the letter?
	A	to ask for a special seasoning
	В	to request a price reduction
	C	to identify concerns
	D	to compliment the store

- 22 In this passage which of the following details support the author's argument?
  - **A** There are many items your store does not carry.
  - **B** I sincerely hope to continue a relationship with your store.
  - **C** I enjoy the selection of produce and fresh bakery items.
  - **D** Your low prices and excellent customer service keep me coming back.
- What does the author want the reader to do?
  - **A** stock the items he finds at other stores
  - **B** match his competitors' prices
  - **C** increase the selection in the bakery
  - **D** sell fresher produce

Go On

### **DIRECTIONS:** Read this poem and then answer questions 24 through 27.

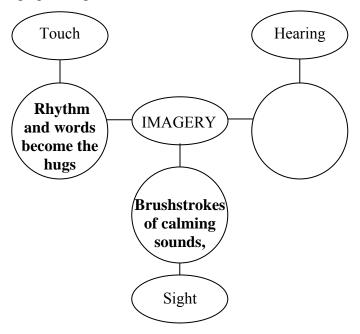
### Music is My Secret Best Friend.

1	Music blaring, chasing my sadness.
	Rhythm and words become the hugs
	Offer comfort; offer love.

- Music caressing, filling the void. Melodic sounds of soothing notes, Offer relief; offer hope.
- 7 Music playing, providing the canvas. Brushstrokes of calming sounds, Offer revival; offer reality.
- 10 Music creating, inventing my reasons To survive and flourish and never look back.
- Music is my secret best friend. 12
- 24 Which of the following stanzas contain **only** the third person point of view?
  - first A
  - third В
  - fourth  $\mathbf{C}$
  - D fifth
- 25 An example of repetition is illustrated with which group of lines?
  - lines 1, 2, 8 A
  - В lines 1, 3, 7
  - lines 3, 6, 9  $\mathbf{C}$
  - lines 2, 4, 6 D

*Revised 9-2-05* Go On

- **26** Based on the poem, how does the author feel about music?
  - music should not be played loudly A
  - В music is an escape from reality
  - $\mathbf{C}$ music blocks creativity
  - $\mathbf{D}$ music helps relieve problems
- **27** Look at the graphic organizer.



What phrase **best** completes the graphic organizer?

- A Music creating, inventing my reasons
- В Melodic sounds of soothing notes,
- $\mathbf{C}$ To survive and flourish and never look back.
- $\mathbf{D}$ Music caressing, filling the void

Go On

### AIMS Sample Test – Reading Answer Key Grade 7

	1	
Item	Correct	Performance
Number	Answer	Objective
1	D	2-1-6
2	A	2-1-7
3	Α	2-1-7
2 3 4 5 6 7	С	2-1-3
5	В	2-1-6
6	С	2-2-1
7	С	1-4-2
8	A A C B C C C D	1-4-5 2-2-2
9	В	2-2-2
10	В	2-2-2
11	B C A C D	2-1-2
12	Α	3-2-1
13	С	3-2-2
14	D	1-6-5
15	D	3-2-2
16	В	3-1-8
17	Α	1-6-7
18	A D C A B	1-4-3
19	С	3-1-10
20	A	3-1-3
21	В	3-1-4
22	Α	3-3-2
23	A	3-3-1
24	B C D	2-1-4
25	С	2-1-7
26	D	2-1-3
27	В	1-6-4

# WRITING

Writi	ng
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### **DIRECTIONS:**

Read the writing prompt below. Use the next page for your prewriting/planning. Then write your draft.

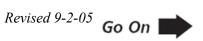
Going to movies is a major source of entertainment for many students. Imagine that the only discount movie theater in your area is closing.

Write a persuasive essay in support of keeping the discount movie theater open.

### Your writing should:

- Include a thesis statement.
- Have a developed point of view with convincing support.
- Have an introduction, body, and conclusion.

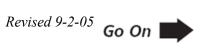
Remember to edit for spelling, grammar, punctuation, and capitalization.

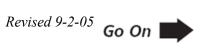


Writing ——	
DIRECTIONS:	Use the prewriting/planning space below for notes, lists, webs, outlines, or anything else that might help you plan your writing

**Prewriting/Planning** 

Writing —	
DIRECTIONS:	Write your draft on the following lines. Look back at the writing prompt and your prewriting/planning as you write your draft.
	Draft





Writing
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#### **FINAL COPY**

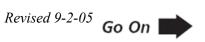
**DIRECTIONS:** 

Now you are going to revise your draft. Read your draft. Then use the questions in the Writer's Checklist as a guide to make changes to your draft. Check each box if you can answer "yes" to that question.

WRITER'S CHECKLIST
Does my paper have a specific audience and a specific purpose?
Does my paper contain a strong controlling idea?
Does my paper stay on topic?
Does my paper include specific and relevant details, reasons, and examples?
Does my paper have an effective beginning, middle, and end?
Does my paper progress in a logical order, and do my ideas flow smoothly?
Does my paper contain words that make it interesting?
Does my paper contain sentences that are clear and varied in structure?
Does my paper include effective use of paragraphing?
Does my paper include correct grammar/usage, punctuation, capitalization, and spelling?

DIRECTIONS:

For each box you did not check, make the change on your draft. Then write your final copy on the following pages.



Writing		
TTITIT		

### FINAL COPY

DIRECTIONS:	Now write your final copy on the following two pages.
	·
-	

### FINAL COPY


## MATHEMATICS

### **AIMS Reference Sheet**

#### PLANE FIGURES: PERIMETERS AND AREAS

Name	Notation	Perimeter (P) Circumference (C)	Area (A)
Triangle	a, b, c = sides h = height	P = a + b + c	$A = \frac{1}{2}bh$ or $A = \frac{bh}{2}$
Rectangle	b = base h = height	P=2(h+b)	A = bh
Circle	r = radius $d = $ diameter	$C = \pi d$ or $C = 2\pi r$	$A = \pi r^2$
Parallelogram	a, b = sides h = height	P = 2(a+b)	A = bh
Trapezoid	a, b, c, d = sides $B_1 = long base$ $B_2 = short base$ h = height	P = a + b + c + d	$A = \frac{(B_1 + B_2)h}{2}$
			Use 3.14 or $\frac{22}{7}$ for $\pi$ .

### **GEOMETRIC SOLIDS: VOLUMES**

Name	Notation	Volume (V)
	l = length	
Rectangular Prism	w = width	V = lwh
	h = height	
Doctorgular Dyramid	B = area of the base	$V = \frac{1}{3}Bh$ or $V = \frac{Bh}{3}$
Rectangular Pyramid	h = height	$V = \frac{3}{3}Bh$ of $V = \frac{3}{3}$
Right Cylinder	r = radius	$V = \pi r^2 h$
Right Cymidei	h = height	$V = \mathcal{U}V $
D: 1. C	r = radius	$1  1  n  \pi r^2 h$
Right Cone	h = height	$V = \frac{1}{3}\pi r^2 h \text{ or } V = \frac{\pi r^2 h}{3}$
Sphere	r = radius	$V = \frac{4}{3}\pi r^3$
Sphere		$\frac{7-3}{3}$

### GEOMETRIC SOLIDS: SURFACE AREAS

Name	Notation	Surface Area (SA)
	l = length	
Rectangular Prism	w = width	SA = 2lw + 2lh + 2wh
	h = height	
Dight Cylinder	r = radius	$SA = 2(\pi r^2) + 2\pi rh$
Right Cylinder	h = height	$SA = 2(\pi r^{-}) + 2\pi r n$

25 Revised 9-2-05



### Mathematics -

**DIRECTIONS:** 

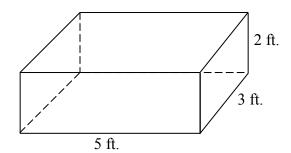
Read each question and choose the best answer.

- 1 Yolanda, Dana, and Julia ran a 200-meter race. The three girls attend Manchester, Allen, and Robles Middles Schools, in no particular order.
  - Yolanda ran faster than Julia, but slower than the girl from Manchester Middle School.
  - The girl from Robles Middle School ran slower than the other two girls.

Which of the following lists the girls and the schools they attend in the order of fastest to slowest?

- **A** Dana (Manchester), Yolanda (Allen), Julia (Robles)
- **B** Yolanda (Allen), Julia (Manchester), Dana (Robles)
- C Dana (Allen), Yolanda (Manchester), Julia (Robles)
- **D** Julia (Robles), Dana (Allen), Yolanda (Manchester)
- Which set below shows the integers in order from **least to greatest**?
  - **A** {-2, -3, 2, 3}
  - **B** {2, 3, -3, -2}
  - **C** {-3, -2, 2, 3}
  - **D** {3, 2, -2, -3}

3 A rectangular prism has the dimensions shown below.



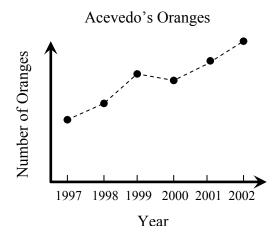
What is the volume of the prism?

- $\mathbf{A} \quad 10 \text{ ft.}^2$
- **B** 10 cm.<sup>2</sup>
- $C = 30 \text{ ft.}^3$
- **D**  $30 \text{ cm.}^3$
- 4 What is the value of the expression below?

- **A** -12
- **B** -7
- **C** 7
- **D** 12



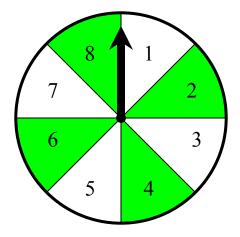
5 The graph below shows the number of oranges harvested from the Acevedo's orange tree over a 6-year period.



Which of the following is a correct conclusion about the graph?

- A Fewer oranges were harvested in 2002 than in 1997.
- **B** More oranges were harvested in 2001 than in 1998.
- C The number of oranges harvested increased every year.
- **D** The number of oranges harvested decreased from 2000 to 2001.
- 6 Tom bought a gallon of water. Which metric unit is **closest** to one gallon? (Use 1 quart = .95 liter)
  - **A** 1 liter
  - **B** 2 liters
  - C 3 liters
  - **D** 4 liters

7 Karina and Michael decided to spin the arrow on the spinner below to determine who would win their game.



Which of the following describes a rule that is fair to both students?

- A Spin a 1, 2, or 3 Karina wins Spin a 4, 5, 6, 7, or 8 – Michael wins
- **B** Spin a 1, 3, 5, 7, or 8 Karina wins Spin a 2, 4, or 6 Michael wins.
- C Spin a 1 or 2 Karina wins. Spin any other number Michael wins.
- **D** Spin an even number Karina wins. Spin an odd number – Michael wins.
- Naomi picked y flowers and will put an equal number of flowers in n vases. Which expression represents the number of flowers Naomi will put in each vase?
  - $\mathbf{A} = \frac{n}{y}$
  - $\mathbf{B}$  n-y
  - $C = \frac{y}{n}$
  - $\mathbf{D}$  y-n

- 9 A large circular mirror has a radius of 12 inches. What is the circumference of this mirror in terms of  $\pi$ ?
  - $12\pi$  inches A
  - $24\pi$  inches
  - $\mathbf{C}$  $36\pi$  inches
  - D  $48\pi$  inches
- Byron will add  $\frac{3}{7}$  to  $\frac{4}{9}$ . **10**

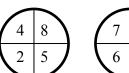
Which of the following should be the first step he would use to correctly solve the problem?

- Find the sum of 3 and 4.
- Find the sum of 7 and 9. В
- Find a common multiple of 3 and 4.
- Find a common multiple of 7 and 9.
- 11 Beth had \$22.30. She bought 4 bottles of water for \$0.65 each, including tax. How much money should Beth have left?
  - \$2.40 A
  - \$2.60 В
  - \$19.70  $\mathbf{C}$
  - \$19.90

12 The first five terms of a pattern are shown below. The rule of the pattern is to multiply by 2 and then subtract 1.

What should be the seventh term of this pattern?

- A 13
- B 14
- $\mathbf{C}$ 25
- 50 D
- 13 The following number disks show an increasing pattern for the sums of their diagonals.







Which disk should be next in the increasing pattern?

A



 $\mathbf{C}$ 



В



D



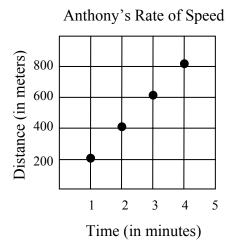
- George is going to sing 4 songs in the school program. In how many different orders can George sing each song once?
  - **A** 4
  - **B** 9
  - **C** 12
  - **D** 24
- 15 Lacy bought a T-shirt and shoes for a total of \$55.00. The shoes cost \$39.95. Which equation could be used to find *t*, the cost of the T-shirt?
  - **A** t + \$39.95 = \$55.00
  - **B** t \$39.95 = \$55.00
  - C t + \$55.00 = \$39.95
  - **D** t \$55.00 = \$39.95
- Which of the following is a characteristic of a triangular pyramid?
  - A It has three vertices.
  - **B** It has four vertices.
  - **C** Its base is a square.
  - **D** Its faces are parallel.

- What is the quotient when 51 is divided by -17?
  - **A** 34
  - **B** 3
  - **C** -3
  - **D** -34
- What is the greatest common factor (GCF) of the following numbers?

- **A** 3
- **B** 6
- **C** 18
- **D** 36
- 19 Each space on these number lines is 1 unit long. Which best shows *X* in the location of -3 on the number line?

  - $B \leftarrow 0 \times X$

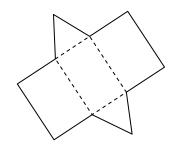
20 Anthony can run at the rate (in meters per minute) shown in the graph below.



Which of the following **best** describes Anthony's rate of speed?

- A 800 meters per minute
- **B** 600 meters per minute
- C 400 meters per minute
- **D** 200 meters per minute
- A color tile will be taken at random from a bag that contains 2 blue tiles, 5 red tiles, and 4 green tiles. What is the probability that the tile will be green?
  - $\mathbf{A} \quad \frac{1}{10}$
  - $\mathbf{B} \quad \frac{1}{4}$
  - $C = \frac{4}{11}$
  - $\mathbf{D} \quad \frac{4}{7}$

Which of the following solids could be formed by the net below?



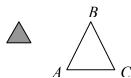
A



В



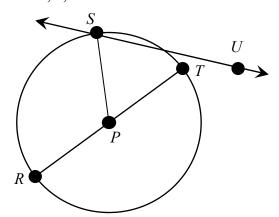
The area of the shaded triangle in the diagram below is 1 square unit.



Which is **closest** to the area of triangle *ABC*?

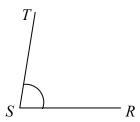
- **A** 2 square units
- **B** 3 square units
- **C** 4 square units
- **D** 5 square units

24 Points R, S, and T lie on circle D.



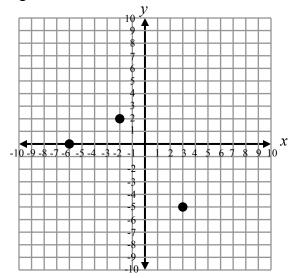
Which two points are endpoints of an arc in circle *D*?

- $\mathbf{A}$  S and R
- $\mathbf{B}$  S and U
- $\mathbf{C}$  P and S
- $\mathbf{D}$  P and T
- 25 Which appears to be **closest** to the measure of  $\angle RST$  below?



- **A** 50°
- **B** 80°
- **C** 100°
- **D** 120°

Which of the following **best** represents the coordinates of the points shown on the grid below?

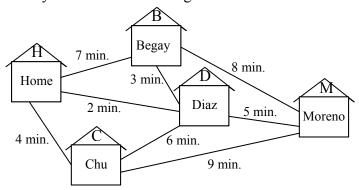


- **A** (-3, -5), (0, -6), (2, 2)
- **B** (-5, 3), (0, -6), (2, -2)
- $\mathbb{C}$  (3, -5), (-6, 0), (-2, 2)
- **D** (3, -5), (0, 6), (-2, -2)
- 27 Carol is conducting an experiment to see which color of sweetened water will attract more hummingbirds. Her first step is to formulate questions necessary for data collections.

Which of the following questions is **not** necessary to collect the data?

- A How many times per minute do hummingbirds' hearts beat?
- **B** How many feet above the ground should the feeders be hung?
- C For how many hours should Carol collect the data?
- **D** How much sugar should be mixed with the water in each feeder?

28 Jeremy is selling candy for his school. He wants to take the shortest route to visit each home only once before returning home.



Based on the vertex-edge graph, what is the shortest route Jeremy can take to each house and then return home?

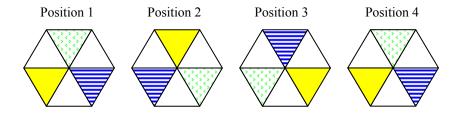
**A** 
$$H \rightarrow D \rightarrow B \rightarrow M \rightarrow C \rightarrow H$$

**B** 
$$H \rightarrow C \rightarrow D \rightarrow M \rightarrow B \rightarrow H$$

$$\mathbf{C} \quad H \to D \to C \to M \to B \to H$$

**D** 
$$H \rightarrow B \rightarrow D \rightarrow M \rightarrow C \rightarrow H$$

29 Carlos made a hexagon and changed its position by using the same rule.



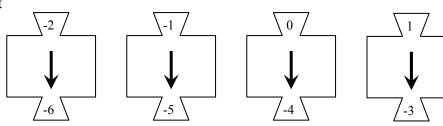
Which of the following is **most likely** the rule Carlos used to change the position of his hexagon?

- **A** Rotate the hexagon so that each triangle moves 3 steps counterclockwise.
- **B** Rotate the hexagon so that each triangle moves 1 step clockwise.
- C Rotate the hexagon so that each triangle moves 1 step counterclockwise.
- **D** Rotate the hexagon so that each triangle moves 2 steps clockwise.

Go On 📂

**30** Which of these could be the rule for the input/output machine shown below?

Input



Output

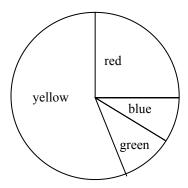
- **A** Input times 3 equals output.
- **B** Input plus 4 equals output.
- **C** Input plus -4 equals output.
- **D** Input divided by 3 equals output.
- 31 Which expression describes the rule used in the input/output model below?

33

Input (x)	9	21	30	3	45	12	27	6
Output ( <i>y</i> )	5	9	12	3	17	6	11	4

- **A**  $x \cdot 2 3 = y$
- **B**  $x \cdot 3 + 2 = y$
- $\mathbf{C} \qquad x \div 2 3 = y$
- $\mathbf{D} \qquad x \div 3 + 2 = y$

A jar contains marbles of four different colors. The graph below shows the proportion of **32** each color marble in the jar.



Which is closest to the percent of yellow colored marbles in the jar?

- 90% A
- 60% В
- $\mathbf{C}$ 30%
- D 10%
- **33** Tom formed a sequence of numbers using the equation 2x + 1 = as shown below.

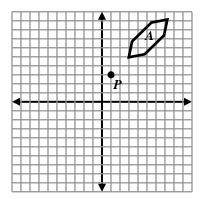
34

Term 1 
$$2(1) + 1 = 3$$
  
Term 2  $2(3) + 1 = 7$   
Term 3  $2(7) + 1 = 15$   
Term 4  $2(15) + 1 = 15$ 

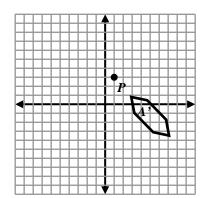
What are the first 5 terms in Tom's sequence?

- 3, 7, 15, 31, 62 A
- 3, 7, 15, 31, 63 В
- $\mathbf{C}$ 3, 7, 15, 30, 61
- 3, 7, 15, 30, 60 D

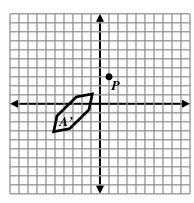
Polygon A will be rotated counter-clockwise  $90^{\circ}$  about point P to form polygon A'.



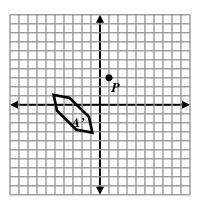
 $\mathbf{A}$ 



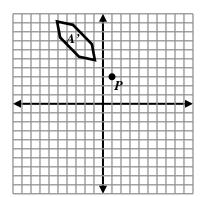
 $\mathbf{C}$ 



В



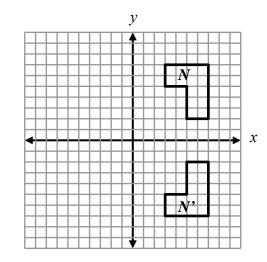
D

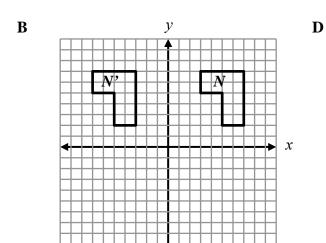


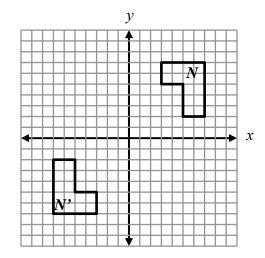
C

35 Which of the following is a single reflection of figure N over the y-axis to form N?

A y







### AIMS Sample Test – Mathematics Answer Key Grade 7

Item	Correct	Performance
Number	Answer	Objective
1	A	5-2-1
2	С	1-1-7
3	A C C	4-4-1
4	D	1-2-5
5	В	2-1-7
6	D	4-4-3
7	D	2-2-2
8	С	3-3-2
9	В	4-4-4
10	D	5-1-2
11	С	1-2-4
12	С	3-1-2
13	В	3-1-3
14	D	2-3-2
15	A	3-3-4
16	В	4-1-2
17	C	1-2-6
18	A	1-1-2
19	Α	1-1-6
20	D	3-4-1
21	С	2-2-1
22	В	4-1-3
23	С	1-3-3
24	A	4-1-8
25	В	1-3-4
26	С	4-3-1
27	A	2-1-1
28	A	2-4-1
29	D	3-1-1
30	С	3-2-1
31	D	3-3-1
32	В	2-1-4
33	В	3-1-2
34	D	4-2-1
35	A	4-2-2